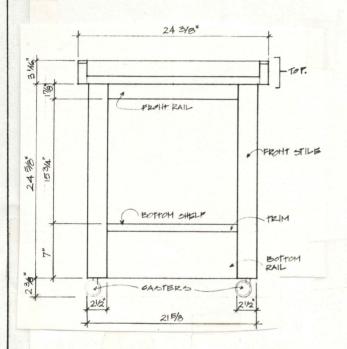
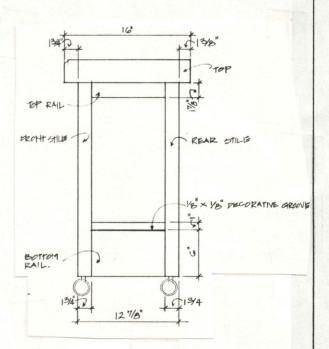
THE CONSTRUCTION PROCESS

ENGINEERING RATIONALE, DESCRIPTION AND SPECIFICATIONS

ROLLING TABLE

ROLLING TABLE





FROHT ELEVATION.

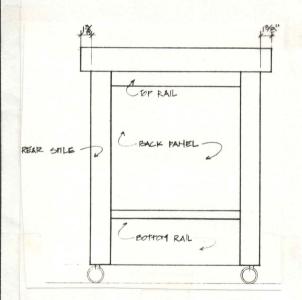
SIDE ELEVATION.

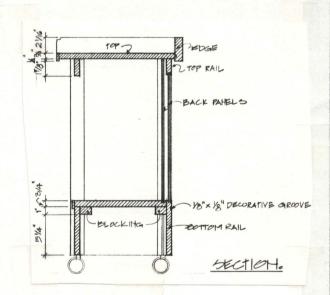
The rolling table is a small personal table which can be easily moved around the office. The table has a top with three sides to prevent small items such as sheets of paper from falling off. It also has a bottom shelf to provide extra storage for items which one would want easy and immediate access to.

The rolling table is made of Maple (some solid pieces and some veneers) and is finished with aniline dyes and wax. The table is available in a wide range of colors.

The construction and fabrication of the table is described within four sub categories:

- 1. The Frame
- 2. The Panels
- 3. The Bottom Shelf and the Top
- 4. Final Assembly.

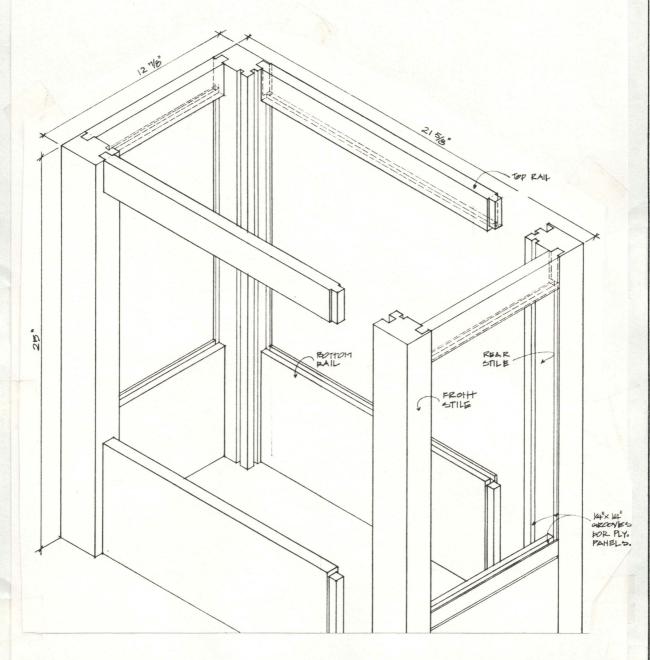




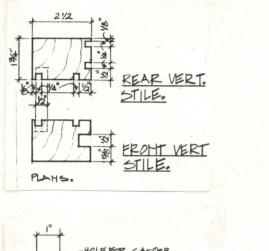
BACK ELEVATION.

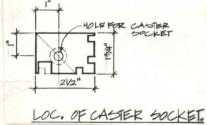
I. THE FRAME

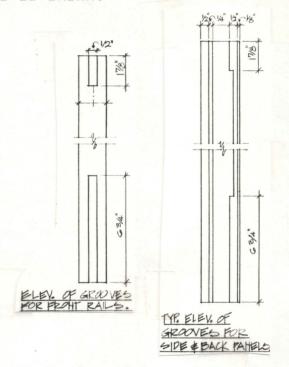
The frame consists of four vertical stiles and eight horizontal rails which when assembled together with the outer plywood panels forms a rigid structure.



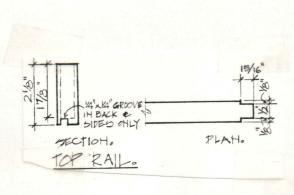
1. Mill the standard sections for the two front stiles and two rear stiles. Cut the pieces to length and run the additional grooves to receive the top and bottom rails. Predrill the holes for the casters as shown.

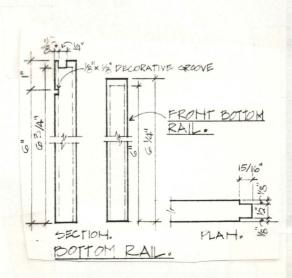






2. Mill the sections for the top and bottom rails, cut them to length and cut tenons in the ends of each piece.

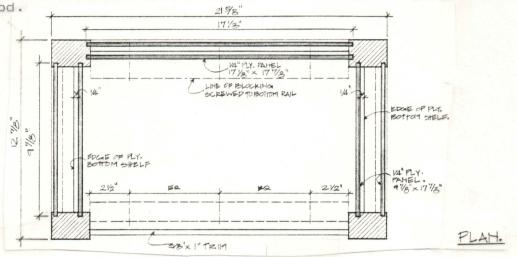




II. The Panels.

The sides of the rolling table are made up of a double wall of 1/4" plywood panels.

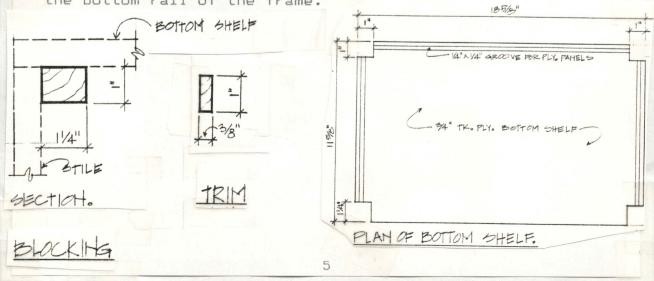
1. Cut the panels to size from 1/4" finish grade Maple plywood.



III a. Bottom Shelf.

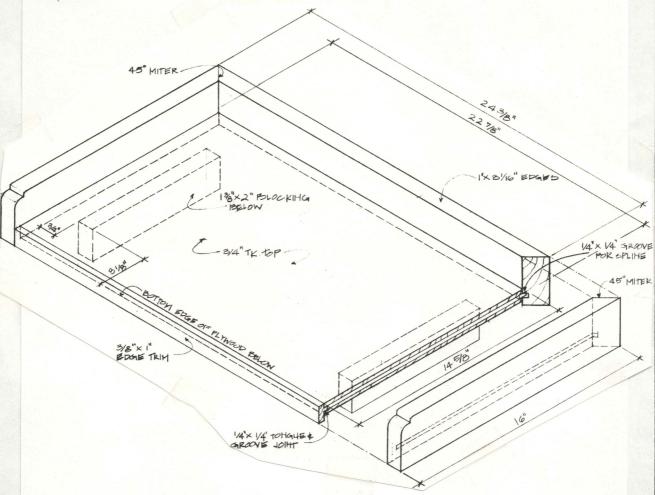
1. Cut the bottom shelf to size out of 3/4" Maple plywood "good" on one side. Run the grooves for the inner plywood panels on the "good" side as shown. Mill and cut the trim piece for the shelf.

2. Mill and cut the blocking for the bottom shelf. Pre-drill the holes for the screws which will attach the blocking to the bottom rail of the frame.

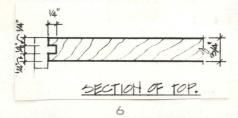


III b. The Top.

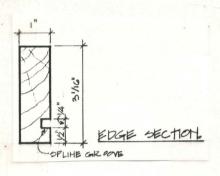
The top of the rolling table consists of a horizontal plywood surface with a front trim and three sides of solid Maple.

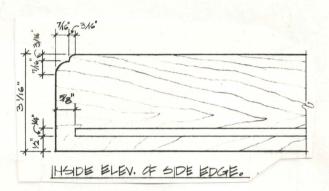


1. Cut the piece for the horizontal surface out of 3/4" finish grade Maple plywood "good" on both sides. Run a groove in all four edges as shown.

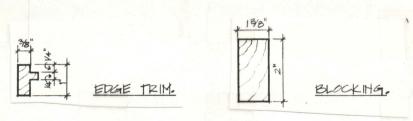


2. Mill the piece for the three sides from solid Maple and cut the pieces to length using a 45 degree miter on both ends of the back piece and one end of each side piece. Shape the front end of each side piece as shown. Run the spline groove in all three pieces. The groove will run through in the back piece but will stop short of the front end in the side pieces.





3. Mill and cut the front trim piece and the blocking to length.



4. Assemble all the pieces using aliphatic resin as shown.

IV. FINAL ASSEMBLY.

Prior to this stage all the individual sub-assemblies should have been built and prepared for final finishing by sanding.

- 1. Assemble the vertical stiles and the four bottom rail pieces using aliphatic resin.
- 2. Insert the three outer plywood panels with the "good" side outward.
- 3. Attach the four pieces of top rail.
- 4. Attach the blocking to the front and rear bottom rail as shown with #8 flathead screws.
- 5. Attach the plywood bottom shelf and the trim piece.
- 6. Insert the inner plywood panels.
- 7. Position the top assembly as shown and attach the inner plywood panel to the blocking on the underside of the top with screws.
- 8. Attach the casters. Two inch Shepherd ball casters have been used for the piece built at CES.

